

Abstract

A protoporphyrinogen oxidase tolerant to photobleaching herbicide and derivatives thereof, comprising a polypeptide having the amino acid sequence represented by SEQ ID No.2 or mutated peptides derived therefrom by deletion, addition, substitution, etc. of one or more amino acids in the above amino acid sequence and having an activity substantially equivalent to that of the protoporphyrinogen oxidase. The acquisition of the novel protoporphyrinogen oxidase, which is highly tolerant to photobleaching herbicide and originates in plant, make it possible to construct plants highly tolerant to photobleaching herbicide via the expression of this enzyme in host plants.

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